CERTIFICATE OF APPROPRIATENESS

Application Date: September 2, 2015

Applicant: SNB 412 Main LP, owner

Property: 412 Main Street Tracts 2A and 3A, Block 44, SSBB Subdivision, City of Houston, Harris County, Texas. The site includes a 13-story steel frame building situated on a 4,626 square foot lot.

Significance: Contributing Neo-Classical-style commercial building, constructed circa 1924, located in the Main Street Market Square Historic District.

Proposal: Alteration – Remove the existing historic, heavily damaged cornice above the 12th floor and replace it with smooth EIFS scored to look like masonry.

- The existing cast stone cornice is deteriorated and is a safety hazard to those walking below. The cost to replicate the cornice is not feasible for the applicant at this time.
- Parts of the cornice will be retained and stored to make casts for possible future replica installation.
- The repair will also consist of installing a new structural system that will be capable of supporting a new stone cornice in the future.

See enclosed application materials and detailed project description on p. 4-15 for further details.

Also See Attachment A for engineering reports.

Public Comment: No public comment received.

Civic Association: No comment received.

Recommendation: **Approval**

HAHC Action: **-**

APPROVAL CRITERIA

ALTERATIONS, REHABILITATIONS, RESTORATIONS AND ADDITIONS

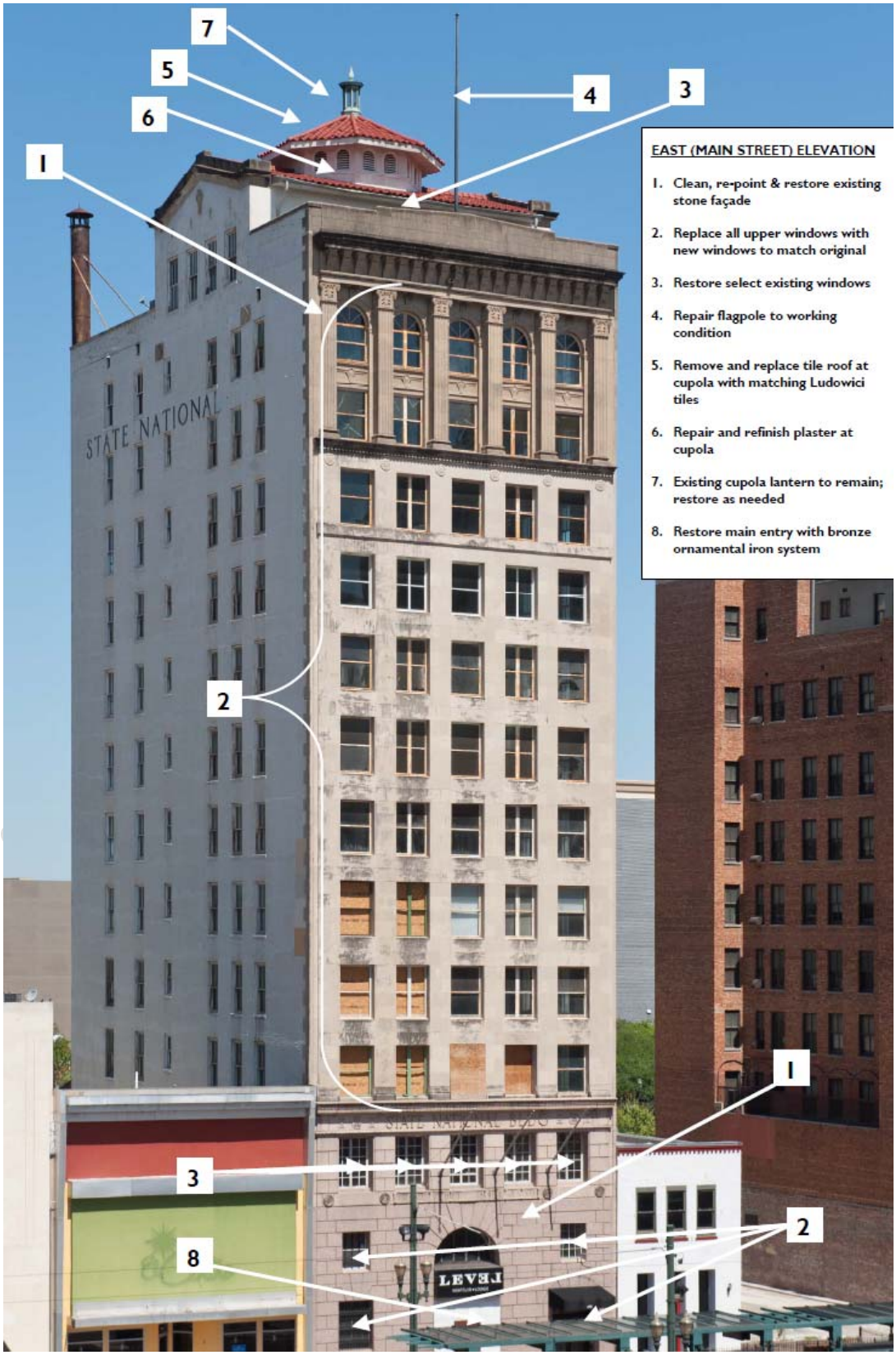
Sec. 33-241(a): HAHC shall issue a certificate of appropriateness for the alteration, rehabilitation, restoration or addition of an exterior feature of (i) any landmark or protected landmark, (ii) any building, structure or object that is contributing to an historic district, or (iii) any building, structure or object that is part of an archaeological site, upon finding that the application satisfies the following criteria, as applicable:

S	D	NA		S - satisfies D - does not satisfy NA - not applicable
☒	☐	☐	(1)	The proposed activity must retain and preserve the historical character of the property; *The original structural system supporting the cornice stonework has failed and has caused much of the material to crack and disintegrate. The cornice condition is hazardous and must be removed.*
☒	☐	☐	(2)	The proposed activity must contribute to the continued availability of the property for a contemporary use;
☒	☐	☐	(3)	The proposed activity must recognize the building, structure, object or site as a product of its own time and avoid alterations that seek to create an earlier or later appearance;
☒	☐	☐	(4)	The proposed activity must preserve the distinguishing qualities or character of the building, structure, object or site and its environment; *Though the cornice is being removed, intact pieces will be kept and incorporated into the interior of the building as reference for future restoration.*
☒	☐	☐	(5)	The proposed activity must maintain or replicate distinctive stylistic exterior features or examples of skilled craftsmanship that characterize the building, structure, object or site; *The proposed scoring of the new material to look like masonry replicates other conditions found on the structure.*
☒	☐	☐	(6)	New materials to be used for any exterior feature excluding what is visible from public alleys must be visually compatible with, but not necessarily the same as, the materials being replaced in form, design, texture, dimension and scale;
☐	☐	☒	(7)	The proposed replacement of missing exterior features, if any, should be based on an accurate duplication of features, substantiated by available historical, physical or pictorial evidence, where that evidence is available, rather than on conjectural designs or the availability of different architectural elements from other structures;
☒	☐	☐	(8)	Proposed additions or alterations must be done in a manner that, if removed in the future, would leave unimpaired the essential form and integrity of the building, structure, object or site;
☒	☐	☐	(9)	The proposed design for any exterior alterations or addition must not destroy significant historical, architectural or cultural material and must be compatible with the size, scale, material and character of the property and the area in which it is located; *The original structural system supporting the cornice stonework has failed and has caused much of the material to crack and disintegrate. The cornice condition is hazardous and must be removed. Pieces will be kept as reference for a later restoration.*
☐	☐	☒	(10)	The setback of any proposed construction or alteration must be compatible with existing setbacks along the blockface and facing blockface(s);
☐	☐	☒	(11)	The proposed activity will comply with any applicable deed restrictions.

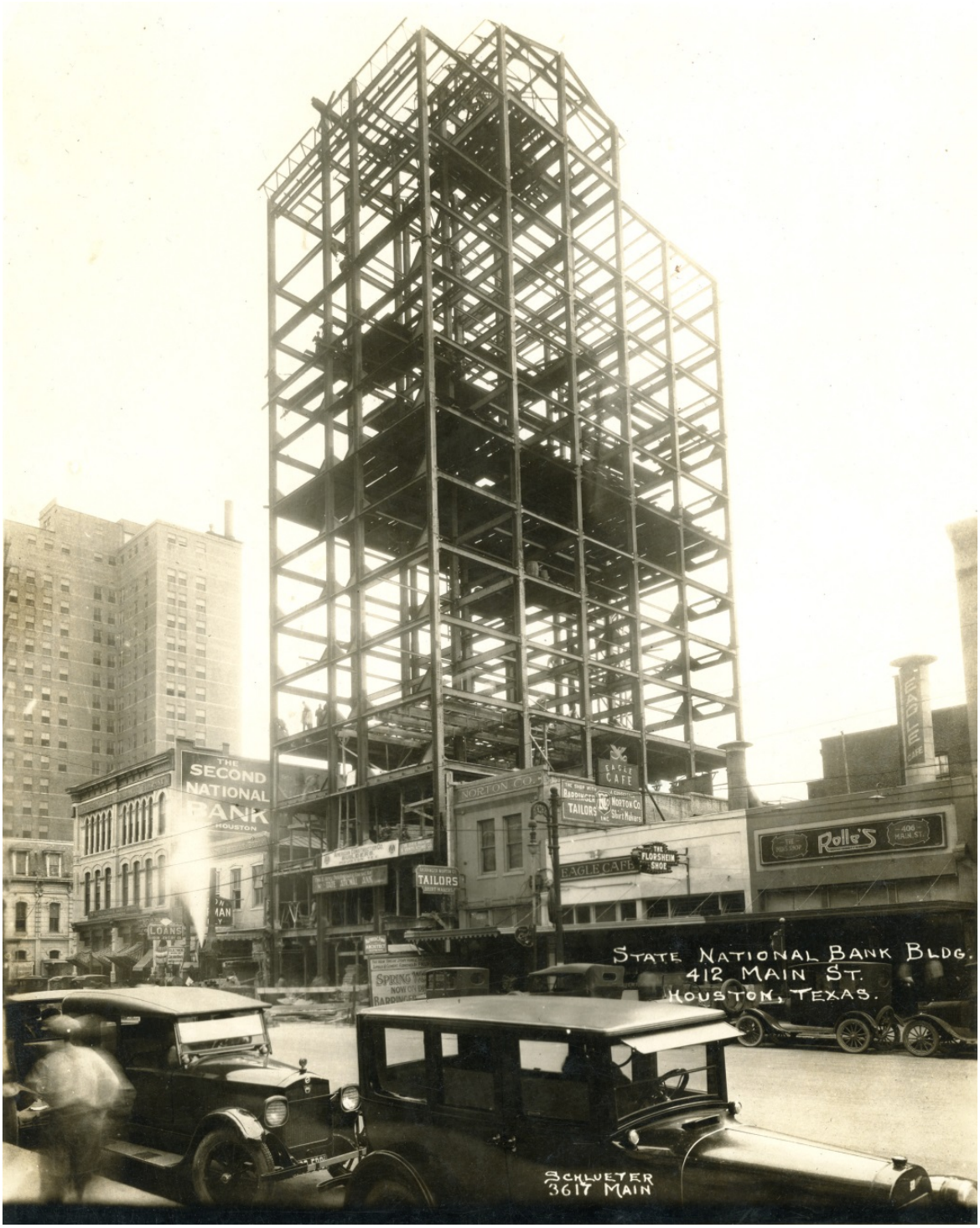
PROPERTY LOCATION

MAIN STREET MARKET SQUARE HISTORIC DISTRICT

CURRENT PHOTO



HISTORIC PHOTO



EAST ELEVATION – FRONT FACING MAIN STREET

EXISTING

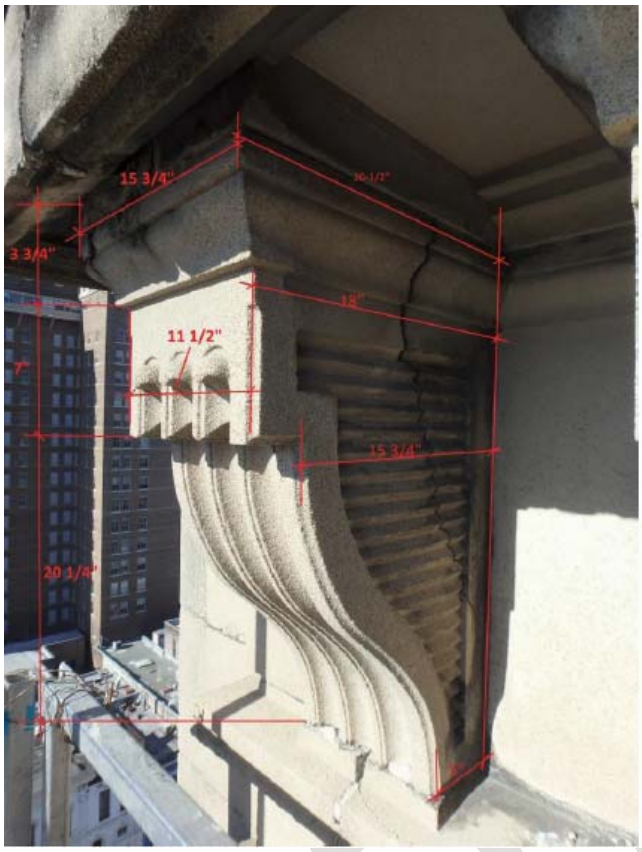
PROPOSED EIFS SCORING

PORTION TO BE REMOVED

ORIGINAL DRAWING TO USE FOR REFERENCE

EXISTING CORNICE CONDITION – RUSTED BRACING

EXISTING CORNICE CONDITION – SHEERING STONE WORK



EXISTING CORNICE CONDITION – SHEERING STONEWORK

EXISTING CORNICE CONDITION – CRACKING STONEWORK

ESTIMATES ON REPAIR PROVIDED BY APPLICANT

Fretz Construction
SINCE 1923

500 FANNIN ST.
SUITE 300
HOUSTON, TEXAS 77002
P 713.641.5777
F 713.641.4676
www.fretzconstruction.com

STATE NATIONAL BUILDING
PARAPET RECONSTRUCTION (WITHOUT ORNAMENTATION)
Preliminary Cost Estimate

Scaffolding, work platform, overhead protection – Big City Access	$	76,940
Demolition of existing stone – TDC Waterproofing	$	65,000
Structural modifications - ALLOWANCE	$	50,000
Exterior wall framing, sheathing	$	27,600
Damproofing	$	6,624
Lath and plaster – Tobin & Rooney	$	58,687
General Conditions – 10 weeks	$	78,300
10% Fee	$	36,315
10% Contingency	$	39,947
	$	**439,413**

ESTIMATED RANGE: $ 420,000 - $ 440,000

EXCLUDES:
1. Costs to date for emergency repairs
2. Engineering expenses (Walter P. Moore)

ALTERNATE: Add EIFS ornamentation on the wall to closely match existing ADD $ 297,000

Fretz Construction Company
July 7, 2015

PROJECT DETAILS

Front Elevation: (East) The alteration removes an approximately 8’ to 9’-5” tall section of damaged stone cornice and replace with smooth EIFS scored to look like masonry.

ATTACHMENT A

WALTER P MOOR ENGINEERING EXISTING CONDITION REPORTS

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY	
REVIEWED BY	
DRAWN BY	PMu
PROJECT NUMBER	D03.15018.01
DATE	6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

01

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY

REVIEWED BY

DRAWN BY PMu

PROJECT NUMBER D03.15018.01

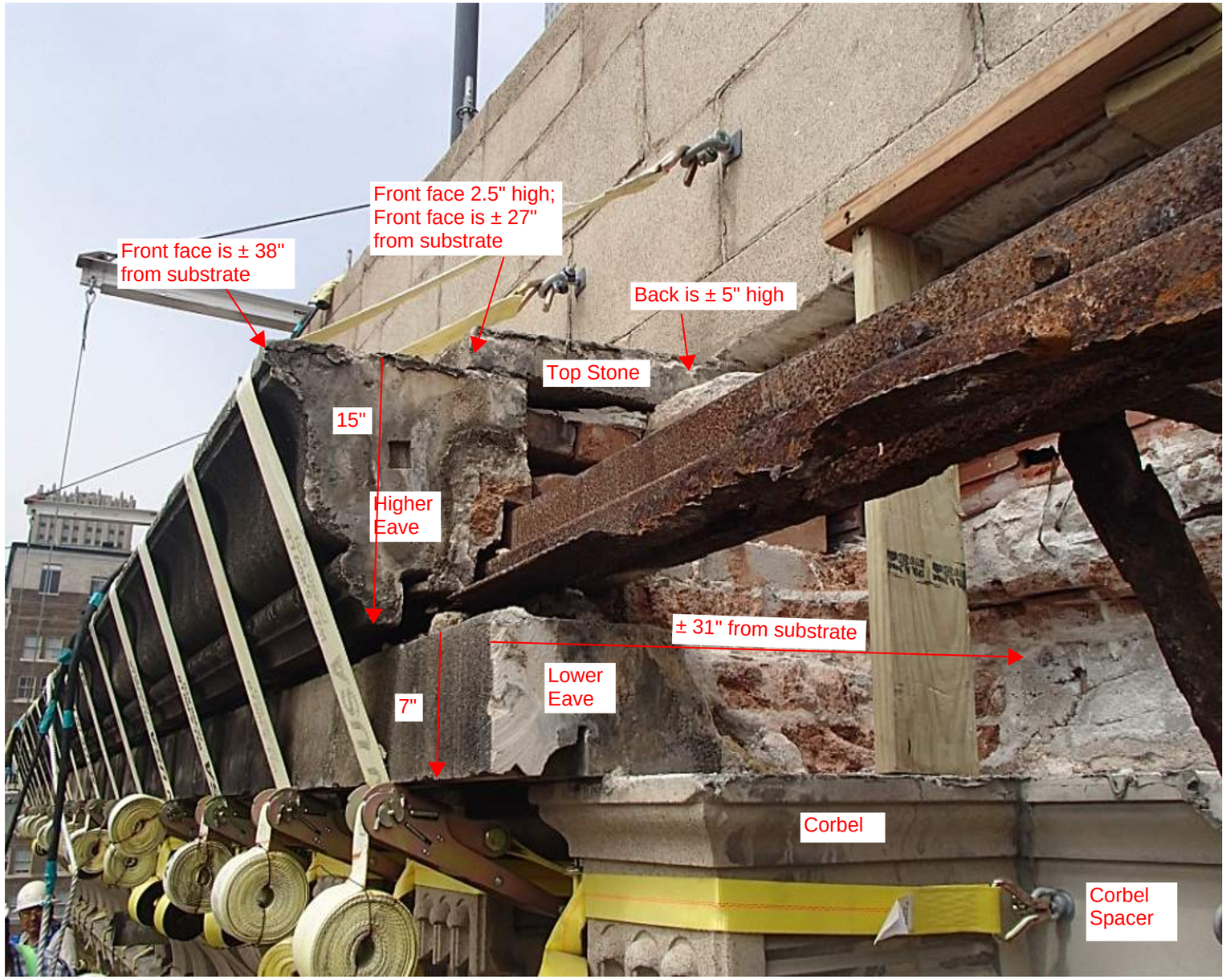
DATE 6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

02



WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

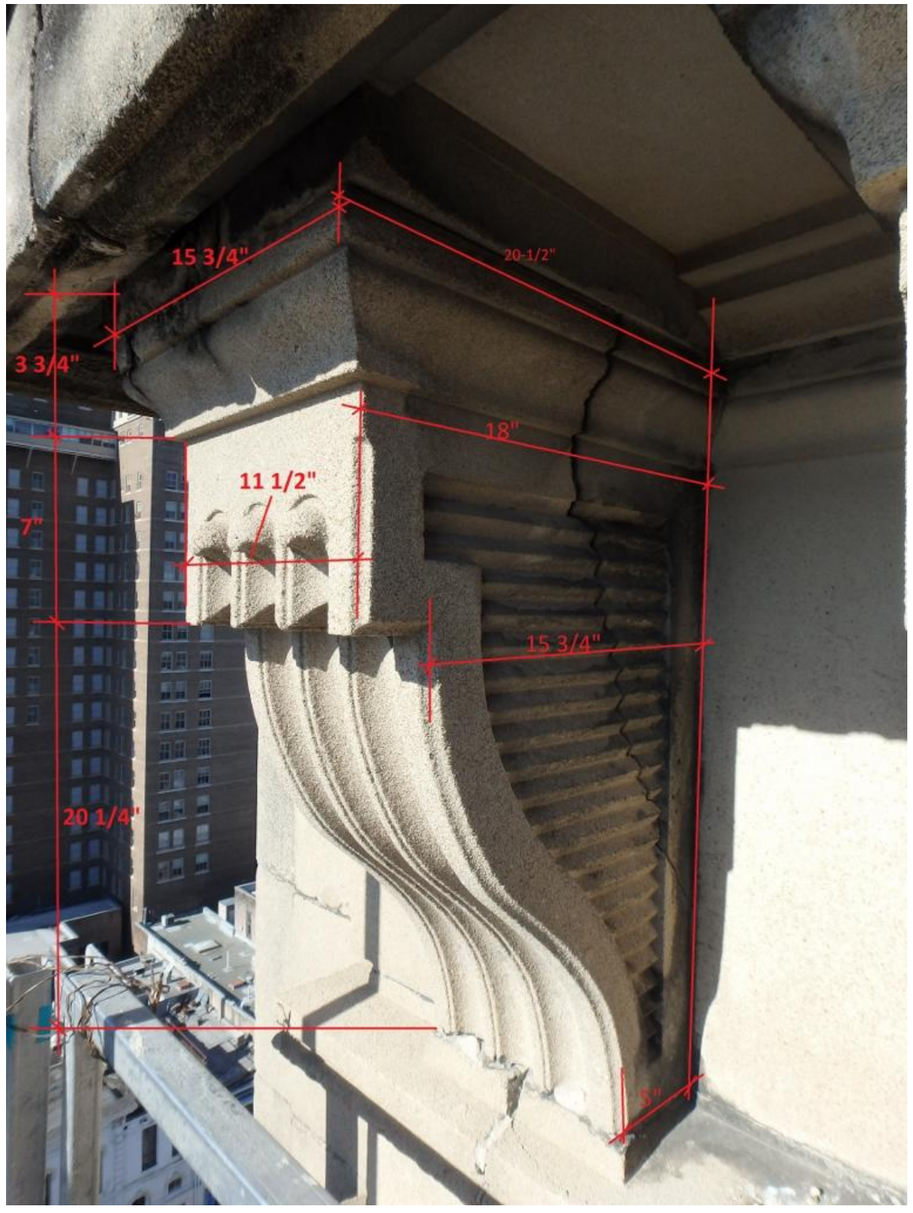
DESIGNED BY	
REVIEWED BY	
DRAWN BY	PMu
PROJECT NUMBER	D03.15018.01
DATE	6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

03



WALTER P MOORE

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1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY	
REVIEWED BY	
DRAWN BY	PMu
PROJECT NUMBER	D03.15018.01
DATE	6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

04

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY	
REVIEWED BY	
DRAWN BY	PMu
PROJECT NUMBER	D03.15018.01
DATE	6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

05

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY	
REVIEWED BY	
DRAWN BY	PMu
PROJECT NUMBER	D03.15018.01
DATE	6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

06

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010.3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY

REVIEWED BY

DRAWN BY PMu

PROJECT NUMBER D03.15018.01

DATE 6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

07

WALTER P MOORE

WALTER P. MOORE AND ASSOCIATES, INC.
1301 McKINNEY STREET, SUITE 1100
HOUSTON, TEXAS 77010-3064

PHONE: 713.630.7300 FAX: 713.630.7396

PROJECT NAME

412 Main Street East Facade Repairs

NO.	DATE	DESCRIPTION

DESIGNED BY

REVIEWED BY

DRAWN BY PMu

PROJECT NUMBER D03.15018.01

DATE 6/14/2015

SHEET TITLE

Facade Member Dimension

SHEET NUMBER

08

WALTER P MOORE

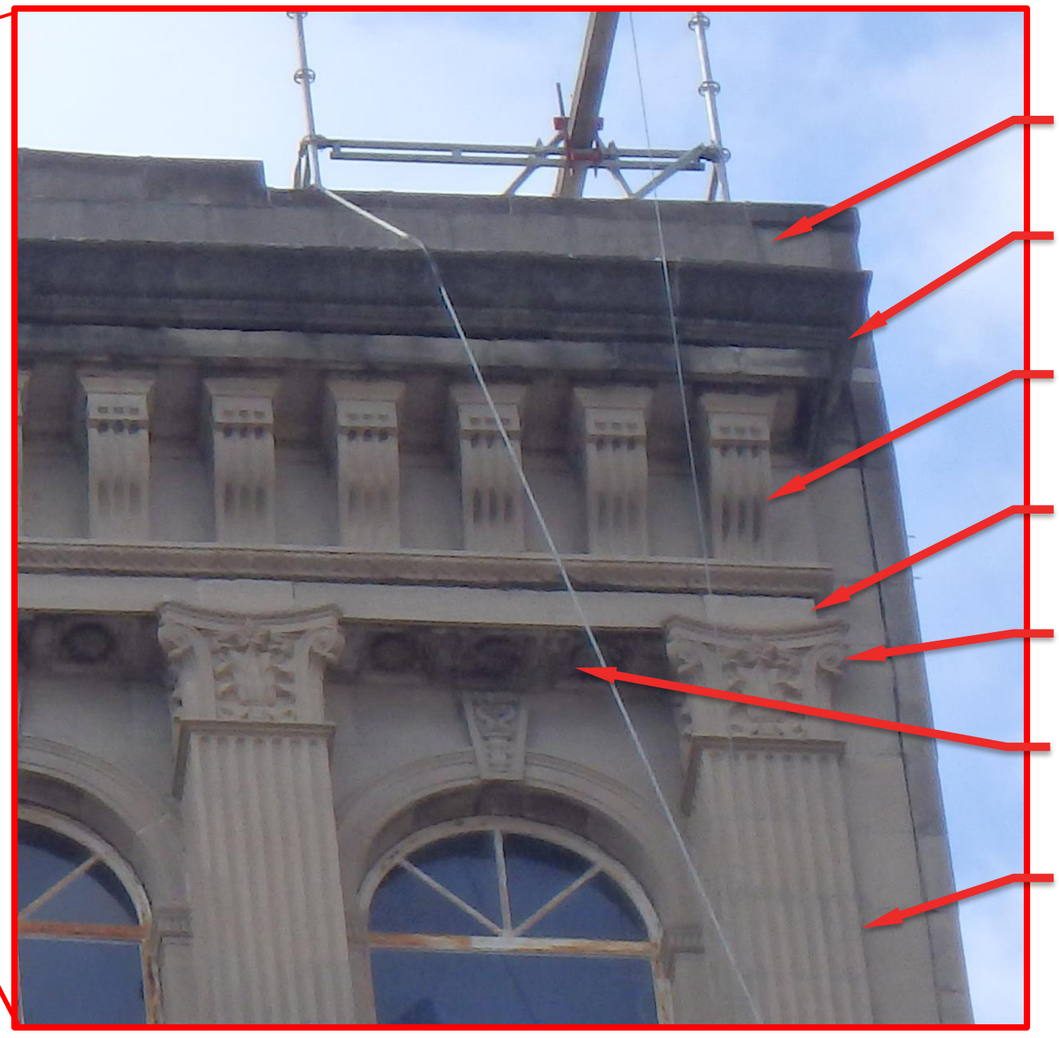
412 MAIN BUILDING
EAST PARAPET REPAIR

Houston, Texas

September 16, 2015

Information presented in this presentation is for schematic design / general reference only and shall not be used for bidding, permitting, and/or construction. Additional engineering analysis, design, and construction document preparation by a licensed professional engineer is required prior to any work being performed.

Parapet Construction



Existing parapet

Existing upper cornice

Existing corbel

Existing lower cornice

Existing pilaster capital

Existing lower cornice soffit

Existing pilaster

EXISTING CONDITION

Upper Cornice – Cast Stone Distress

- Upper cornice cast stone pieces generally exhibiting displacement and mortar joint separation, likely due to corrosion-related expansion stresses.
- Most significant distress conditions were observed at the eastern and western upper corner cast stone members.

Upper cornice layer exhibiting joint separation

Cornice stone pieces exhibiting lateral displacement

Upper Cornice – Structural Backup Corrosion Distress

- Exploratory openings exposed severely corroded structural steel members supporting the cornice assembly.
- Structural steel corrosion appeared to be the cause of the observed stone displacement and mortar joint separation.

Views of corroded steel angle for upper cornice gravity support

Upper Parapet/Cornice Infill

- Ungrouted masonry infill was observed behind cornice stones, likely for transfer of gravity loads from the parapet and upper cornice assemblies to the underlying steel backup framing.

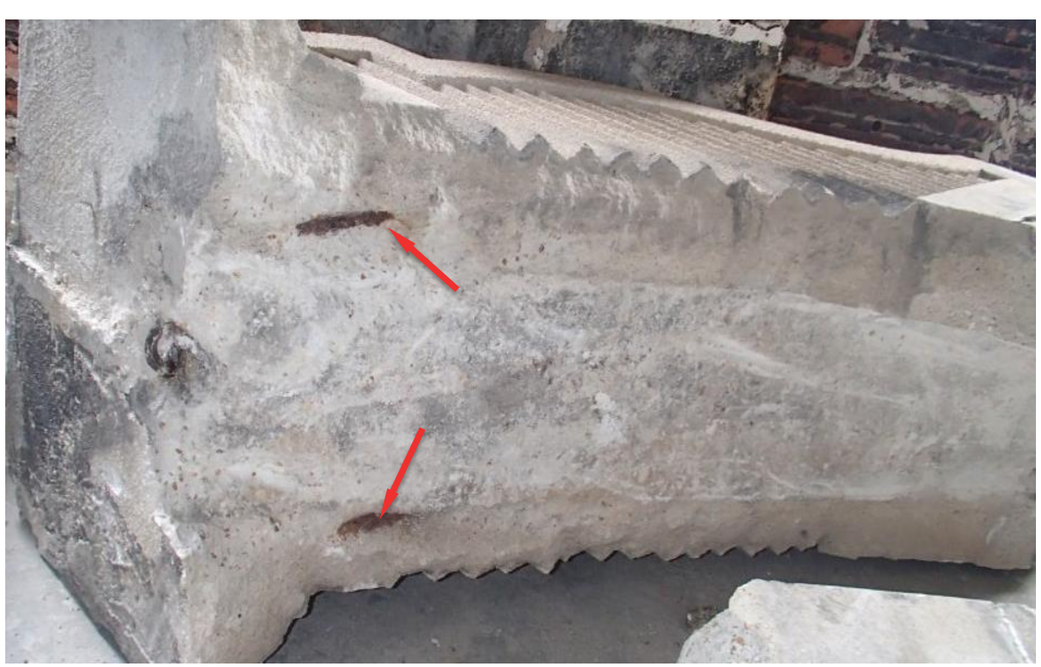
Loose brick infill behind cornice stone

Hollow infill behind cornice stone

Corbel – Cast Stone Distress

- Approximately half of the cast stone corbels exhibited visible cracking distress caused by expansion forces induced by corroded embedded reinforcing steel.

Cracking distress in the southern most corbel



Removed corbel pieces, red arrows indicate corroded embedded reinforcement bars

Cracking distress in a typical corbel

Lower Cornice – Cast Stone Distress

- Cast stone cracking and spalling distress was typically observed at the front edge of the lower cornice members, likely due to corrosion-related expansion stresses.
- Additional cast stone cracking distress, running in a north south direction, was typically observed at the soffit of the lower cornice members.

Cast stone spalling distress the lower cornice

Soffit cracking of the cast stone at the lower cornice

Lower Cornice Internal Distress

- Exploratory openings exposed severely corroded reinforcing steel bars at the root of the lower cornice front face sections exhibiting cracking and spalling.
- Exploratory openings were not performed at the soffit cracking of the lower cornice cast stone distress due to structural and fall hazards concerns. This cracking is likely due to the presence of corroding embedded reinforcement; however, the distress may be the result of restraint cracking induced by the corbel movement.

Corroded reinforcing steel at front edge of soffit

Cracking at soffit overhead surface

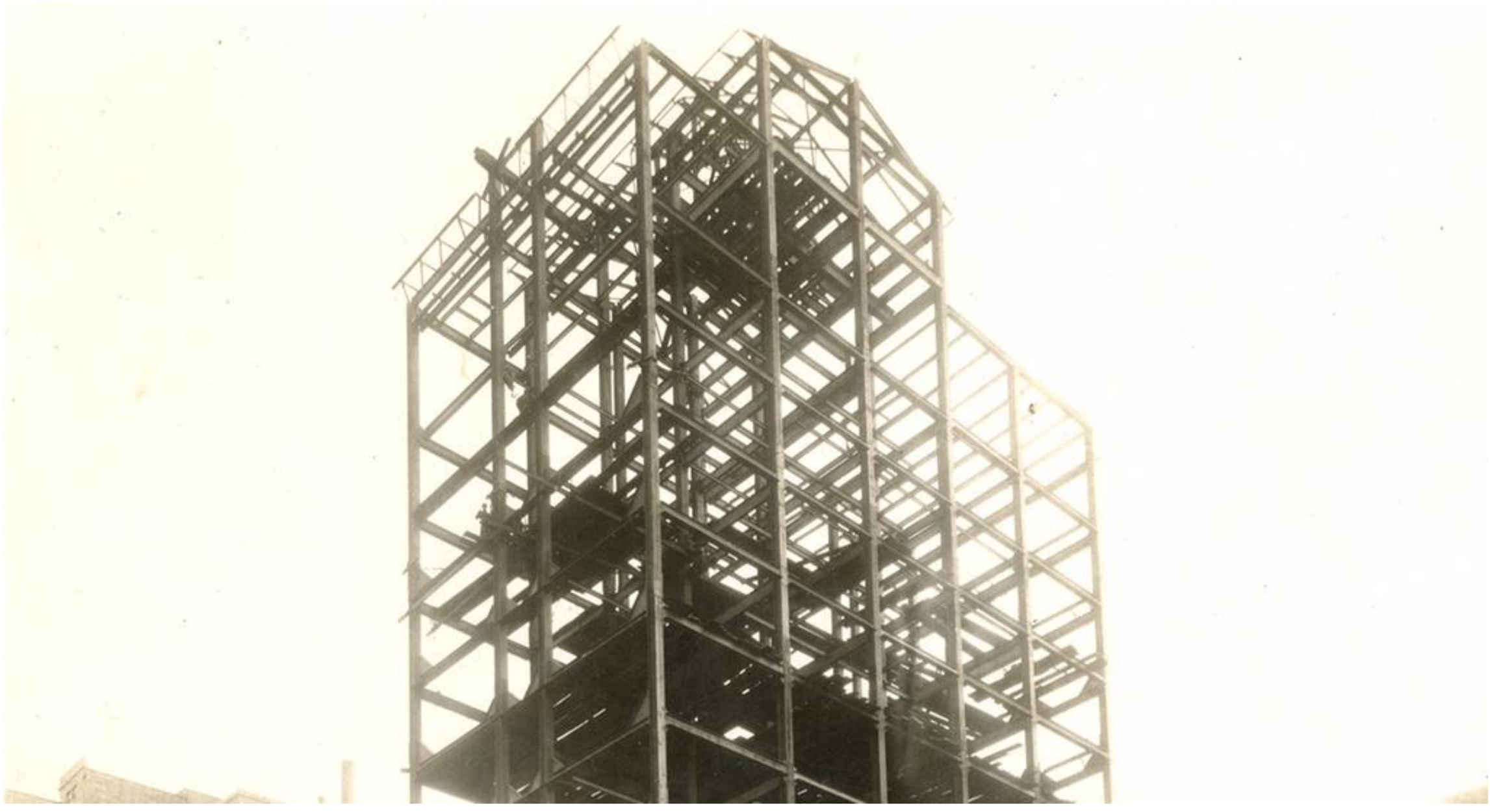
REPAIR

Proposed Schematic Parapet and Cornice Repair

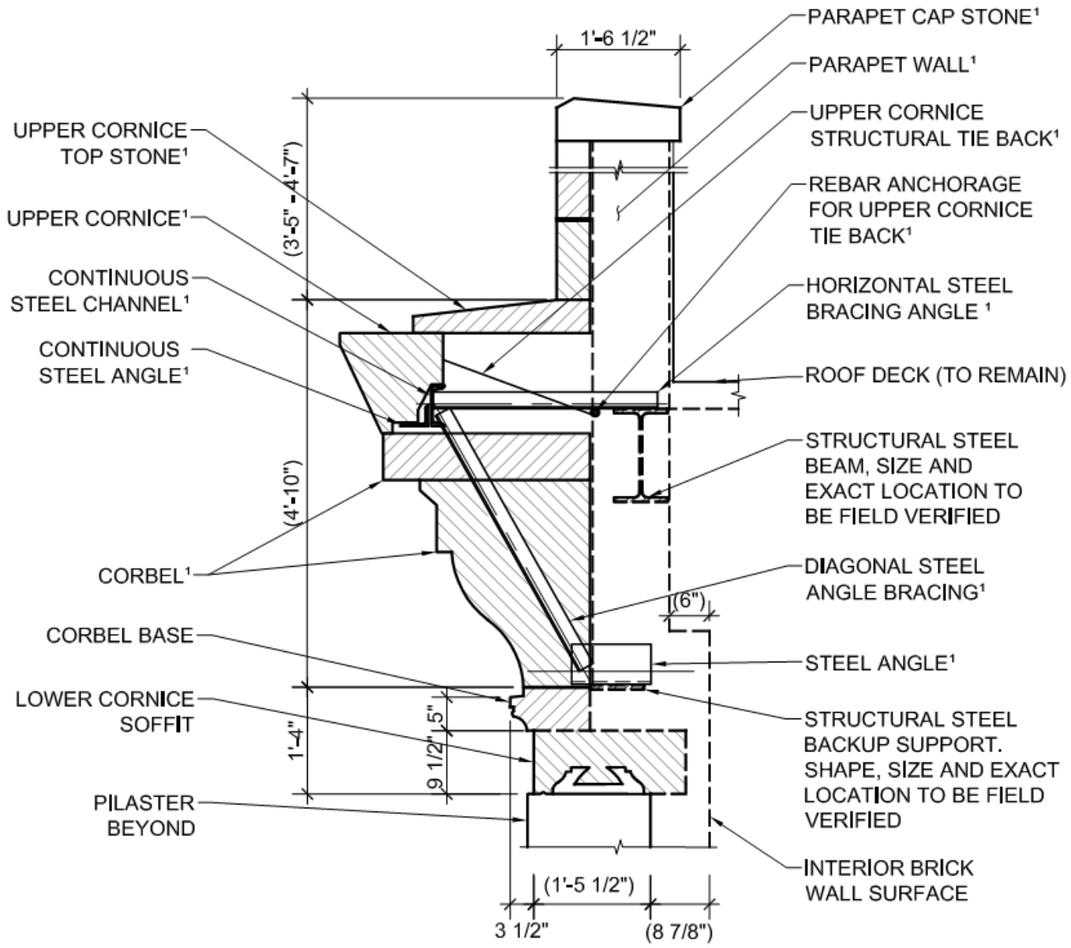
- Extents of repair limited to east facade, from top of parapet to the soffit of the lower cornice.
- Repair concept requires approval of the Houston Archaeological And Historical Commission (HAHC).
- A lightweight parapet façade recladding system is proposed to minimize loading onto the existing structure.
  - New Structure: New steel framing to connect to the into existing interior steel frame.
  - Existing Structure: Clean, epoxy/intumescent coat, and strengthen or replace as required.
  - Facade: Exterior Insulation and Finishing System (EIFS) with common bond mortar joint engraving to generally replicate existing cast stone parapet pattern.

Extents of proposed repair

Existing Structural Framing (during original construction)



Proposed Schematic Parapet and Cornice Repair

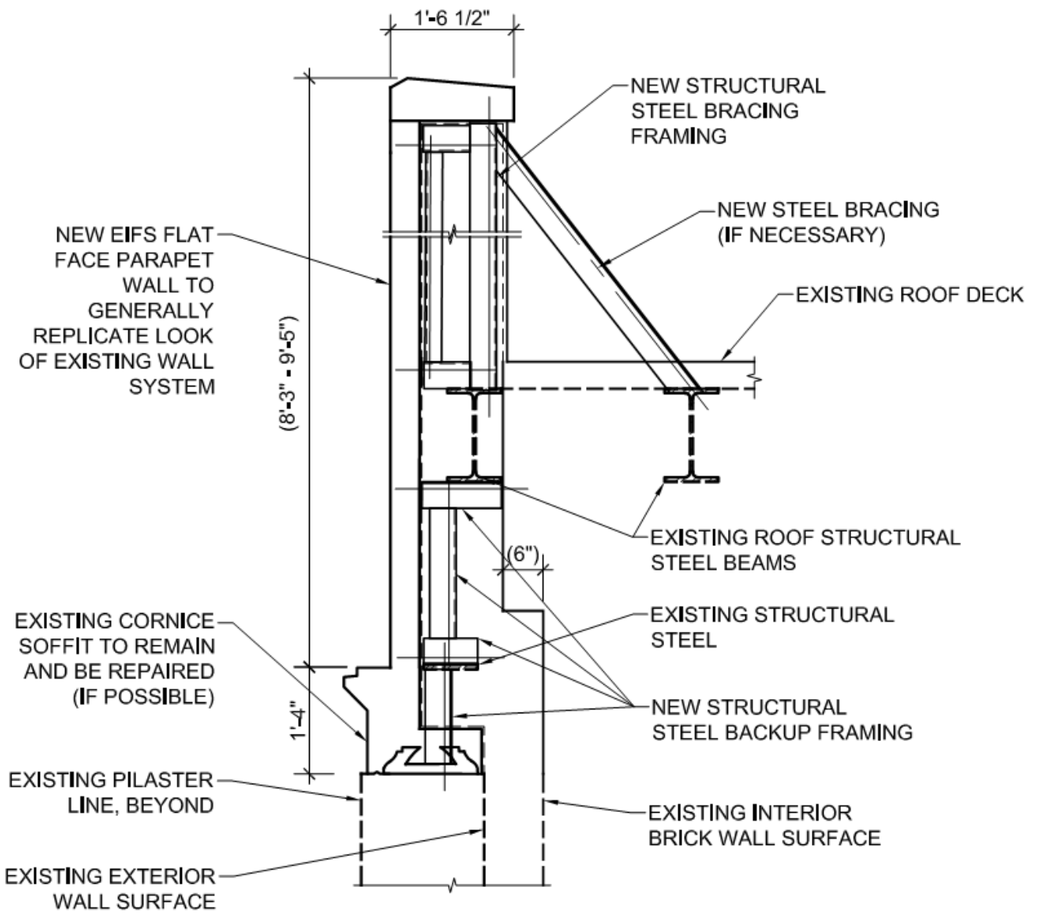


NOTES: 1. THIS ITEM TO BE REMOVED AND DISCARDED.

XX

EXISTING FRONT WALL SECTION, SCHEMATICALLY SHOWN

SCALE: NTS



XX

PROPOSED FRONT WALL SECTION, SCHEMATICLY SHOWN

SCALE: NTS

Concept Rendering of Proposed Schematic Façade Repairs